Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Title V
AIR QUALITY PERMIT
Issued under 401 KAR 52:020

Permittee Name:	**Philips Lighting Company**
Mailing Address:	**320 Vaksdahl Avenue, Danville, Kentucky 40422**
Source Name:	**Philips Lighting Company/ North America**
Mailing Address:	**Same as above**
Source Location:	**320 Vaksdahl Avenue, Danville, Kentucky 40422**
Permit Number:	**V-01-020**
Log Number:	**50253**
Review Type:	**Operating, Title V, synthetic minor**
Source ID #:	**21-021-00001**
Regional Office	**London** **875 S. Main Street, London, KY 40741**
County:	**Boyle**
Application Complete Date:	**January 22, 1998**
Issuance Date:	**May 9, 2002**
Expiration Date:	**May 9, 2007**

John S. Lyons, Director
Division for Air Quality

Rev #	Permit type	Log #	Complete Date	Issuance Date	Summary of Action
----	Initial Issuance	50253	01/22/98	05/09/02	

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto and shall become the final permit unless the U.S. EPA files an objection pursuant to 401 KAR 52:100, Section 10.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

01 (01) Lime glass batch mixing and handling

Description: Several types of raw material are received in bulk by railcar or trucks. The material is either transported pneumatically or with bucket elevators to storage silos in the mix house where it is held until measuring and mixing. The emissions are captured and vented to a baghouse.
Construction/ modification commenced: 1990

APPLICABLE REGULATIONS:
401 KAR 59:010, Section 3(1)(a), New process operations.

1. Operating Limitations:
The maximum operating fill rate shall not exceed 17.1 tons/hr.

2. Emission Limitations:
a. Visible emissions shall not equal or exceed 20% opacity.
b. Particulate emissions shall not exceed 1.2 lbs/hr
Self imposed limit to preclude PSD requirements.

Compliance Demonstration Method
Particulate emission rate in (lbs/hour) =[Monthly production rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)] x [100 - baghouse control efficiency]

3. Testing Requirements: None

4. Specific Monitoring Requirements:
To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:
a. The total raw materials fill rate for the Philips operating month, with the dates of the operating month noted.
b. The hours of operation for the Philips operating month, with the dates of the operating month noted.
c. The particulate emissions as calculated using the formula under “Compliance Demonstration Method” above.

5. Specific Recordkeeping Requirements:
Records shall be maintained of Reference Method 9 opacity observations, the total raw materials fill rate for the Philips operating month with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emissions as calculated on a monthly basis using the formula specified in this permit under “Compliance Demonstration Method”.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:

Maintain on site a log of monthly readings of the pressure drop across the baghouse, and ensure it remains in the proper operating range.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

02 (02) Lead glass batch mixing and handling

Description: Several types of raw material are received in bulk by railcar or trucks. The material is either transported pneumatically or with bucket elevators to storage silos in the mix house where it is held until measuring and mixing. The emissions are captured and vented to a baghouse.
Construction/ modification commenced: 1990

APPLICABLE REGULATIONS:
401 KAR 59:010, Section 3(1)(a), New process operations.

1. Operating Limitations:
The maximum operating fill rate shall not exceed 1.8 tons/hr.

2. Emission Limitations:
a. Visible emissions shall not equal or exceed 20% opacity.
b. Particulate emissions shall not exceed 3.0 lbs/hr.

Compliance Demonstration Method:
Particulate emission rate in (lbs/hour) =[Monthly production rate x Emission factor listed in Kentucky EIS/ (Hours of operation per month)] x [100 - baghouse control efficiency]

3. Testing Requirements: None

4. Specific Monitoring Requirements:
To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:
a. The total raw materials fill rate for the Philips operating month, with the dates of the operating month noted.
b. The hours of operation for the Philips operating month, with the dates of the operating month noted.
c. The particulate emissions as calculated using the formula under "Compliance Demonstration Method" above.

5. Specific Recordkeeping Requirements:
Records shall be maintained of Reference Method 9 opacity observations, the total raw materials fill rate for the Philips operating month with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emissions as calculated on a monthly basis using the formula specified in this permit under "Compliance Demonstration Method".

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:

Maintain on site a log of monthly readings of the pressure drop across the baghouse, and ensure it remains in the proper operating range.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (03) Lime glass melting furnace

Description: A natural gas side port regenerative melting furnace which produces lime glass for the manufacture of incandescent bulbs and tubing. The furnace uses natural gas as primary fuel with number 2 fuel oil and propane as back up fuels. The total heat input of the furnace burners is 50 million Btu/hr.
Construction commenced: 1990

APPLICABLE REGULATIONS:
401 KAR 59:010, Section 3(1)(a), New process operations.

1. Operating Limitations:

a. The maximum glass production rates shall not exceed 15.6 tons/hr.
b. The lime melting furnace shall not use the NO. 2 fuel oil for more than 1850 hours per year.
c. The lime melting furnace shall not use propane for more than 1850 hours per year.

2. Emission Limitations:

a. Visible emissions shall not equal or exceed 20% opacity.
b. Particulate emissions shall not exceed 18.0 lbs/hr.

Self imposed limit to preclude PSD requirements

Compliance Demonstration Method:

Particulate emission rate in (lbs/hour) =[(Monthly production rate x Emission factor listed in Kentucky EIS) + (Monthly furnace fuel usage x Emission factor listed in Kentucky EIS)] / (Hours of operation per month)

3. Testing Requirements: None

4. Specific Monitoring Requirements:

To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:

a. The total glass production rate for the Philips operating month, with the dates of the operating month noted.
b. The hours of operation for the Philips operating month, with the dates of the operating month noted.
c. The particulate emissions as calculated using the formula under “Compliance Demonstration Method” above.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

Records shall be maintained of Reference Method 9 opacity observations, the total glass production rate for the Philips operating month with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emissions as calculated on a monthly basis using the formula specified in this permit under "Compliance Demonstration Method".

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

04 (04) Lead glass melting furnace

Description: A natural gas side port regenerative melting furnace which produces lead glass for the manufacture of glass tubing. The furnace uses natural gas as primary fuel with propane as back up fuel. The total heat input of the furnace burners is 30 million Btu/hr.
Construction/ modification commenced: 1995

APPLICABLE REGULATIONS:
401 KAR 60:005, Section 3(1)(ff) incorporating by reference 40 CFR 60, Standards of performance for new stationary sources, Subpart CC, Standards of performance for glass manufacturing plants

1. Operating Limitations:

a. The maximum glass production rates shall not exceed 1.4 tons/hr.
b. The lead melting furnace shall not use propane for more than 1850 hours per year.

2. Emission Limitations:

Particulate emissions shall not exceed 0.20 lb/ton of glass produced, three-hour average [40CFR60.292 (a)(1)].

Compliance Demonstration Method:

Particulate emission rate in (lb/ton glass produced) ={[(Monthly production rate x Emission factor listed in Kentucky EIS) + (Monthly furnace fuel usage x Emission factor listed in Kentucky EIS)] / (Hours of operation per month)}

3. Testing Requirements: None

4. Specific Monitoring Requirements:

To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:

a. The total glass production rate for the Philips operating month, with the dates of the operating month noted.
b. The hours of operation for the Philips operating month, with the dates of the operating month noted.
c. The particulate emissions as calculated using the formula under “Compliance Demonstration Method” above.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

Records shall be maintained of Reference Method 9 opacity observations, the total glass production rate for the Philips operating month with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emissions as calculated on a monthly basis using the formula specified in this permit under "Compliance Demonstration Method".

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:

Maintain on site daily log of the electrostatic precipitator field voltages per the operating meters, and ensure the readings are within the proper operating ranges. During routine maintenance of add-on pollution controls in accordance with 40 CFR 60.292(e), the particulate matter emission limitation set out in Condition 2 do not apply.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

06 (06) Bulb forming

Description: A ribbon machine equipped with a chipper sucker to extract hot molten chips of glass to avoid producing defective bulbs.
Construction commenced: 1969

APPLICABLE REGULATIONS:
401 KAR 61:020, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction before July 2, 1975.

1. Operating Limitations:
The maximum production rates shall not exceed 5.0 tons/hr.

2. Emission Limitations:
a. Visible emissions shall not equal or exceed 40% opacity [401 KAR 61:020, Section 3(1)(a)].
b. Particulate emissions shall not exceed 12.1 lbs/hr [401 KAR 61:020, Section 3(2)(a)].

Compliance Demonstration Method:
Particulate emission rate in (lbs/hour) = (Monthly production rate x Emission factor listed in Kentucky EIS) / (Hours of operation per month)

3. Testing Requirements: None

4. Specific Monitoring Requirements:
To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:
a. The total production rate for the Philips operating month, with the dates of the operating month noted.
b. The hours of operation for the Philips operating month, with the dates of the operating month noted.
c. The particulate emissions as calculated using the formula under “Compliance Demonstration Method” above.

5. Specific Recordkeeping Requirements:
Records shall be maintained of Reference Method 9 opacity observations, the production rate for the Philips operating month with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emissions as calculated on a monthly basis using the formula specified in this permit under “Compliance Demonstration Method”.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

07 (07) Mold Coating Spray

Description: This is a spray coating process where bulb molds are coated for use on the ribbon bulb machine.
Construction commenced: 1952

APPLICABLE REGULATIONS:
401 KAR 61:020, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction before July 2, 1975.

1. Operating Limitations:
Mirasol usage rate shall not exceed 0.17 gal/hr, based on a 24-hour average

2. Emission Limitations:
a. Visible emissions shall not equal or exceed 40% opacity [401 KAR 61:020, Section 3(1)(a)].
b. Particulate emissions shall not exceed 2.58 lbs/hr and [401 KAR 61:020, Section 3(2)(a)].

Compliance Demonstration Method:
Particulate emission rate in (lbs/hour) = (Monthly usage rate of the Mirosal (or equivalent) per Philips operating month) x Emission factor listed in Kentucky EIS) / (Hours of operation per Philips operating month)

3. Testing Requirements: None

4. Specific Monitoring Requirements:
To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following based on the Philips operating month:
a. The monthly usage rate of the coating material.
b. The monthly hours of operation based on the Philips operating month.

5. Specific Recordkeeping Requirements:
Records shall be maintained of Reference Method 9 opacity observations, total usage rate of the cleaner and caustic for the Philips operating month, with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emission as calculated on a monthly basis using the formula specified in this permit under "Compliance Demonstration Method".

6. Specific Reporting Requirements:
See Conditions 5, 6, 7, and 8 in Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

08 (08) Mold stripping tank

Description: This is a dip stripping tank to clean the molds. The tank has the capacity to hold 150 gallons.
Construction commenced: 1952

APPLICABLE REGULATIONS:
401 KAR 61:020, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction before July 2, 1975.

1. Operating Limitations:

a. The 70% sodium hydroxide solution usage rate shall not exceed 0.40 gal/hr, based on a 24-hour average.
b. TEXO 1263 (or equivalent) usage rate shall not exceed 0.133 gal hr, based on a 24-hour average.

2. Emission Limitations:

a. Visible emissions shall not equal or exceed 40% opacity [401 KAR 61:020, Section 3(1)(a)].
b. Particulate emissions shall not exceed 2.58 lbs/hr and [401 KAR 61:020, Section 3(2)(a)].
c. See group requirement.

Compliance Demonstration Method:
Particulate emission rate in (lbs/hour) = (Monthly usage rate of the Na(OH) x Emission factor listed in Kentucky EIS) / (Hours of operation per month)

3. Testing Requirements: None

4. Specific Monitoring Requirements:

To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:

a. The usage rate of the sodium hydroxide solution and TEXO 1263 or equivalent for the Philips operating month with the dates of the operating month noted.
b. The hours of operation for the Philips operating month, with the dates of the operating month noted.
c. The particulate emissions as calculated using the formula under “Compliance Demonstration Method” above.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

Records shall be maintained of Reference Method 9 opacity observation, the usage rate of the sodium hydroxide solution and TEXO 1263 or equivalent for the Philips operating month with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emissions as calculated on a monthly basis using the formula specified in this permit under "Compliance Demonstration Method".

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

13 (13) Cullet conveying

Description: Soda lime glass cullet which consists of broken, scrap, or rejected lime glass is crushed and returned to the mix house for reuse in the mixing/melting operation. Particulate emissions are controlled by two baghouses.
Construction commenced: 1969

APPLICABLE REGULATIONS:
401 KAR 59:010, Section 3(1)(a), New process operations.

1. Operating Limitations:
The maximum operating rates shall not exceed 6.0 tons/hr.

2. Emission Limitations:
a. Visible emissions shall not equal or exceed 20% opacity.
b. Particulate emissions shall not exceed 5.68 lbs/hr [401 KAR 59:010, Section 3(2)(a)].

Compliance Demonstration Method:
Particulate emission rate in (lbs/hour) = [(Monthly processing rate x Emission factor listed in Kentucky EIS) / (Hours of operation per month)] x (1- baghouse control efficiency)

3. Testing Requirements: None

4. Specific Monitoring Requirements:
To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:
a. The total operating rate for the Philips operating month, with the dates of the operating month noted.
b. The hours of operation for the Philips operating month, with the dates of the operating month noted.
c. The particulate emissions as calculated using the formula under "Compliance Demonstration Method" above.

5. Specific Recordkeeping Requirements:
Records shall be maintained of Reference Method 9 opacity observations, the operating rate for the Philips operating month with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emissions as calculated on a monthly basis using the formula specified in this permit under "Compliance Demonstration Method".

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:

Maintain on site a log of the monthly readings of the pressure drop across the baghouse, and ensure it remains in the proper operating range.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

14 (14) Lead glass crusher

Description: Particulate emissions from the lead glass cullet crusher are controlled by a baghouse.
Construction commenced: 1969

APPLICABLE REGULATIONS:
401 KAR 61:020, Section 3(1)(a), Existing process operations applicable to each emission unit which commenced construction before July 2, 1975.

1. Operating Limitations:
The maximum operating rate shall not exceed 4.25 tons/hr.

2. Emission Limitations:
a. Visible emissions shall not equal or exceed 40% opacity [401 KAR 61:020, Section 3(1)(a)].
b. Particulate emissions shall not exceed 10.8 lbs/hr [401 KAR 61:020, Section 3(2)(a)].

Compliance Demonstration Method:
Particulate emission rate in (lbs/hour) = [(Monthly processing rate x Emission factor listed in Kentucky EIS) / (Hours of operation per month)]x(1- baghouse control efficiency)

3. Testing Requirements: None

4. Specific Monitoring Requirements:
To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:
a. The total operating rate for the Philips operating month, with the dates of the operating month noted.
b. The hours of operation for the Philips operating month, with the dates of the operating month noted.
c. The particulate emissions as calculated using the formula under “Compliance Demonstration Method” above.

5. Specific Recordkeeping Requirements:
Records shall be maintained of the Reference Method 9 opacity observations, the operating rate for the Philips operating month with the dates of the operating month noted, and the hours of operation for the operating month.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:

Maintain on site a log of the monthly readings of the pressure drop across the baghouse, and ensure it remains in the proper operating range.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

05 (05)Two Gas/Oil Indirect Heat Exchangers

Description: These are 2 gas/oil boilers used for steam heat.
Construction commenced: 1952

APPLICABLE REGULATIONS:
401 KAR 61:015, Section 2(3)(b), Existing indirect heat exchangers applicable to each unit which commenced construction before April 9, 1972.

1. Operating Limitations:
The maximum heat input for each indirect heat exchanger shall not exceed 5.02 mmBTU/hour.

2. Emission Limitations:
a. Visible emissions shall not equal or exceed 40% opacity [401 KAR 61:015, Section 4(2)(a)].
b. Particulate emissions shall not exceed 0.681 lbs/mmBTU [401 KAR 61:015, Section 4].
c. Sulfur dioxide emissions shall not exceed 5.7 lbs/mmBTU [401 KAR 61:015, Section 5].

Compliance Demonstration Method:
a. Particulate emission rate in (lbs/mmBTU) = [(Monthly usage rate x Emission factor listed in Kentucky EIS) / (total monthly mmBTU).
b. Sulfur dioxide emission rate in (lbs/mmBTU) = [(Monthly usage rate x Emission factor listed in Kentucky EIS) / (total monthly mmBTU).

3. Testing Requirements: None

4. Specific Monitoring Requirements:
To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

5. Specific Recordkeeping Requirements:
Records shall be maintained of the Reference Method 9 opacity observations, the monthly usage rate of the natural gas, the monthly hours of operation, and the particulate emissions as calculated using the formula under "Compliance Demonstration Method" above.

6. Specific Reporting Requirements:
Any exceedances over the opacity, particulate emissions, or sulfur dioxide limits as stated in this permit shall be reported to the Division as specified in Section F. The company shall certify to the Division annually compliance with the regulations as applied to this emission point.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

17 (17) Two Lehr ovens

Description: The continuous annealing lehrs are used to relieve the stress. The combined heat input for both ovens is 15 mmBtu/hr. Natural gas is the primary fuel with propane serving as a back up.
Construction commenced: 1969 and 1995

APPLICABLE REGULATIONS: None

1. **Operating Limitations:**
   The two lehr ovens shall not use propane for more than 1850 hours per year.

2. **Emission Limitations:** None

3. **Testing Requirements:** None

4. **Specific Monitoring Requirements:** None

5. **Specific Recordkeeping Requirements:**
   Records are to be kept of how many hours the propane fuel is used.

6. **Specific Reporting Requirements:** None

7. **Specific Control Equipment Operating Conditions:** None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

32 (32) Two mold stripping tanks

Description: Two dip stripping tanks to clean the molds. The tanks have the capacity to hold 150 gallons, each.
Construction commenced: 1995

APPLICABLE REGULATIONS:
401 KAR 59:010, Section 3(1)(a), New process operations.

1. Operating Limitations:

a. The 70% sodium hydroxide solution usage rate for both tanks combined shall not exceed 0.80 gal/hr, based on a 24-hour average.

b. TEXO 1263 (or equivalent) usage rate for both tanks combined shall not exceed 0.266 gal hr, based on a 24-hour average.

2. Emission Limitations:

a. Visible emissions shall not equal or exceed 20% opacity.

b. Particulate emissions shall not exceed 2.34 lbs/hr [401 KAR 61:020, Section 3(2)(a)].

c. See group requirement.

Compliance Demonstration Method:
Particulate emission rate in (lbs/hour) = (Monthly usage rate of the Na(OH) x Emission factor listed in Kentucky EIS) / (Hours of operation per month)

3. Testing Requirements: None

4. Specific Monitoring Requirements:

To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
Determine the opacity of emissions during operation from each stack or vent by Reference Method 9 monthly, or more frequently if requested by the Division.

Philips Lighting shall monitor the following:

a. The usage rate of the sodium hydroxide solution and TEXO 1263 or equivalent for the Philips operating month with the dates of the operating month noted.

b. The hours of operation for the Philips operating month, with the dates of the operating month noted.

c. The particulate emissions as calculated using the formula under “Compliance Demonstration Method” above.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

Records shall be maintained of Reference Method 9 opacity observation, the usage rate of the sodium hydroxide solution and TEXO 1263 or equivalent for the Philips operating month with the dates of the operating month noted, the hours of operation for the operating month, and the particulate emissions as calculated on a monthly basis using the formula specified in this permit under "Compliance Demonstration Method".

6. Specific Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS:

There is only one group requirement for this plant: plant-wide emissions of sodium hydroxide are subject to Regulation 401 KAR 63:021. This section specifies the plant-wide emission limit for sodium hydroxide and applies to all the affected facilities listed below.

LIST OF POINTS: 8(08), 32(32)

APPLICABLE REGULATION:

401 KAR 63:021, Existing sources emitting toxic air pollutants, applies to the toxics pollutants being emitted from each of the affected facilities listed above. Note that the requirements listed here are state origin requirements.

1. Operating Limitations:

See specific operating limitations under individual emission point listing.

2. Emission Limitations:

Pursuant to Regulation 401 KAR 63:021, Section 1, the hourly allowable for the affected facilities given under the "list of points" shown above, shall not be exceeded based on 24-hr average:

Air Pollutant Toxic	Allowable (lb/hr)
Sodium hydroxide	1.17

Compliance Demonstration Method:

Plantwide Hourly Emission Rate = Sum of (P_i x E_i / H_i)

Where P_i = The daily usage rate at each emission point.
E_i = Emission factor listed in Kentucky emission inventory system for each pollutant under that emission point.
H_i = Hours of operation per day (24) for each emission point.
I = Corresponds to each individual emission point.

3. Testing Requirements: NA

4. Specific Monitoring Requirements:

See specific monitoring requirements for each individual emissions point listing.

5. Specific Recordkeeping Requirements:

See specific reporting requirements for each individual emissions point listing.

6. Specific Reporting Requirements: NA

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Conditions:

See specific control equipment conditions for each individual emissions point listing.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulation
1.	Formed cullet manufacturing (5 ton/hr)	401 KAR 59:010
2.	Sandblasting (8.76 ton/yr)	401 KAR 59:010
3.	Glass surface treatment (27.2 ft^3/hr)	401 KAR 53:010
4.	#2 Diesel fuel tank (300 gallon)	
5.	#2 Diesel fuel tank (400,000 gallon)	
6.	Unleaded gasoline tank (300 gallon)	
7.	Kerosene tank (300 gallon)	
8.	Cullet transportation interior	
	Baghouse in cave (1.4 tons/hr)	401 KAR 59:010
9.	Cullet transportation baghouse	
	on mezzanine (1.4 tons/hr)	401 KAR 59:010
10.	Shaker belt baghouse (1.4 tons/hr)	401 KAR 59:010
11.	Ground water treatment (3.65 million gal/yr)	401 KAR 63:020*
12.	Wastewater location (18.25 mill gal/yr)	401 KAR 63:020*
13.	Boiler chemical tanks (240 gallons)	401 KAR 63:020*
14.	Cullet hoppers/storage (1.4 tons/hr)	401KAR 59:010&63:020*
15.	Raw materials unloading	401KAR 59:010,63:010
16.	End formers (151,198 tons/yr)	
17.	Sandblast on mezzanine (8.76 tons/yr)	401 KAR 59:010

*****Trace elements of chemical compounds as referenced in 401 KAR 63:020 affect the applicability of these insignificant activities.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the material incorporated by reference in 401 KAR 52:020, Section 10; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. PM emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

2. For emission points, 01, 02, 13 and 14, the source shall maintain on site a log of monthly readings of the pressure drop across the baghouse, and ensure it remains in the proper operating range.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements.
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.
   [Material incorporated by reference by 401 KAR 52:020, Section 1b (IV)1]

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:020, Sections 1b(IV) 2 and 1a(8)]

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control quipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
   d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.
   e. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.
   [Material incorporated by reference by 401 KAR 52:020, Section 1b (V)1.]

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6. [Material incorporated by reference by 401 KAR 52:020, Section 1b V 3, 4.]

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the London Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period, and
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
London Regional Office
875 S. Main St.
London, KY 40741

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including termination, revocation and reissuance, revision or denial of a permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 3]

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 6]

   This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:

   a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.

3. The permittee shall furnish information upon requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 7,8]

4. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority. [Material incorporated by reference by 401 KAR 52:020, Section 7(1)]

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 14]

6. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 4]

7. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 15)b]

8. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [Material incorporated by reference by 401 KAR 52:020, Section 1a, 10]

9. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3)(b)]

10. This permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 9]

11. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

12. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11(3)(d)].

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11(3)(a)]

14. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source

15. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
    (a) Applicable requirements that are included and specifically identified in the permit and
    (b) Non-applicable requirements expressly identified in this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the division. [401 KAR 52:020, Section 12]

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the division after the completeness determination has been made on any application, by whatever deadline the division sets. [401 KAR 52:030 Section 8(2)]

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(e) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations are exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

   e. This requirement does not relieve the source from other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Section 24(2)]

(f) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 3346
   Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the division or the U.S. EPA.

(g) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.

SECTION G - GENERAL PROVISIONS (CONTINUED)

b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166

e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.